TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
MEMPHIS ENVIRONMENTAL FIELD OFFICE

INSPECTION REPORT

DISCHARGER:	Memphis Regional Intermodal Facility
TRACKING NUMBER:	TN0081108
OPERATOR:	Norfolk Southern Railway Company
DATE OF VISIT:	August 30, 2012
INSPECTORS:	Joellyn Brazile, Lew Hoffman and Mark Jordan, Tennessee Department of Environment and Conservation (TDEC), Division of Water Resources/Water Pollution Control (WPC)
OTHERS PRESENT:	Robin Hagerty (AMEC)

DETAILS OBSERVED:

North of Highway 57

- According to the phasing map provided by Ms. Hagerty, the area located north of Highway 57 is mostly in Phase 2 of construction as shown on EC-21 of the Erosion Control Plan (ECP). The phasing map depicts the area at the easternmost and westernmost ends of the wye tracks to be in Phase 1A of construction.
- The lead track north of Highway 57 and the western and eastern wye tracks appeared to have the permanent gravel base, ballast, cross ties and track in place. Trains are accessing the site.
- **Photo 1** shows the berm and swale up-gradient from SW 23 located south of the eastern wye track and main line track. The bottom of the swale appeared to be sufficiently stabilized/vegetated. However, the slopes of the berm were not (see **photo 2** for close-up of berm). Rills and gullies were observed. Although the berm appears to have more established vegetation than during the March 12, 2012, inspection, the berm remains insufficiently stabilized/vegetated.
- **Photo 2** shows a close-up of the berm shown in **photo 1**, located south of the eastern wye track. Rills and gullies were observed. The berm was not sufficiently stabilized/vegetated with permanent perennial vegetation. Although the berm appears to have more established vegetation than during the March 12, 2012, inspection, the berm remains insufficiently stabilized/vegetated.
- **Photo 3** shows the lower portion of the swale leading to SW23. The swale appeared to be sufficiently stabilized/vegetated in some areas. However, erosion was observed on the slope adjacent to the rip rap.
- **Photo 4** shows the lower portion of the swale leading to SW22. The swale appeared to be sufficiently stabilized/vegetated in areas. However, insufficiently stabilized/vegetated areas were observed throughout the swale/slope.

- **Photo 5** shows the lower portion of the swale leading to SW24. The swale appeared to be sufficiently stabilized/vegetated in some areas. However, insufficiently stabilized/vegetated areas were observed throughout the swale/slope.
- **Photo 6** shows the lower portion of the swale leading to SW25. It appeared to be sufficiently stabilized/vegetated in some areas. However, insufficiently stabilized/vegetated areas were observed throughout the swale/slope. Erosion gullies were observed adjacent to the rip rap located on the bank of Stream 5.
- **Photo 7** is of Stream 5 looking upstream from the eastern wye bridge over Stream 5. The banks of the stream appeared to be sufficiently covered with rip rap.
- **Photo 8** is of Stream 5 looking downstream from the eastern wye bridge over Stream 5. The fabric on the bank of Stream 5 adjacent to SW25 did not appear to be permanent.
- **Photo 9** shows Pipe #1 and the area surrounding Pipe #1. The swale conveying drainage to Pipe #1 appeared sufficiently stabilized/vegetated in areas. However, sparse vegetation was observed in areas including but not limited to the slope upgradient (indiciated by the white arrows) and adjacent to the pipe. A gully has formed adjacent to the top of the pipe (indicated by the red arrow).
- **Photo 10** shows the outlet end of Pipe #1. The vegetative cover on the banks and bottom of the swale down-gradient from Pipe #1 and up-gradient from SW21 appeared sufficiently stabilized/vegetated with the exception of an area at the top of the Pipe #1 headwall.
- The temporary road crossing over Stream 5 has been removed.
- The swale conveying drainage to SW26 appeared sufficiently vegetated.
- Areas along the east and west sides of the lead track, north of Highway 57, south of the main line, were not sufficiently vegetated.

South of Highway 57 up to approximately Station 75+00 Lead Track L-1/L-2 and the slope/swale associated with SW 28

- According to the phasing map provided by Ms. Hagerty, the area located south of Highway 57, along the west and east sides of the lead track, up to approximately Station 75+00 Lead Track L-1/L-2, and the slope/swale associated with SW28 is in Phase 2 of construction as shown on EC-21, EC-23 and EC-24 of the ECP.
- The lead track south of Highway 57 appeared to have the permanent gravel base, ballast, cross ties and track in place. Trains are accessing the site.
- Ms. Hagerty indicated that SW1 and SW2 had been shifted closer to the track and Highway 57, instead of adjacent to Highway 57 and Stream 5 and Stream 2 respectively, due to the TDOT construction work.
- **Photo 11** shows the noise berm at approximately Lead Track L-1 Station 35+00. Ms. Hagerty indicated that because they began to see slope failure, the berm had recently been re-graded and sprayed with ProMatrix. Vegetative growth in the newly sprayed areas was not observed. Insufficient stabilization/vegetation was previously documented during inspections conducted on August 23, 2011, and March 12, 2012.
- **Photo 12** shows Pipe #3 and the lower portion of the swale north of Pipe #3. Pipe #3 and the swale along the eastern side of the noise berm drain into Pipe #2. Areas of the slope

and swale surrounding Pipes #2 and #3 were not sufficiently vegetated, including but not limited to the transition area between the gravel and vegetation.

- **Photo 13** shows the area surrounding SW3. The area appeared sufficiently vegetated/stabilized, except in a few areas, including but not limited to the area directly down-gradient of the headwall and rip rap.
- The swale conveying drainage to SW3 along the east side of the lead track was not sufficiently vegetated in several areas.
- The noise berm directly south of Pipe #3 appeared sufficiently vegetated.
- **Photo 14** shows the area surrounding SW4. The area appeared sufficiently vegetated/stabilized, except in a few areas, including but not limited to the area north of the outfall adjacent to the Enhanced Rock Check Dam (ERCD).
- **Photo 15** shows Pipes #5 and #6 associated with SW4. The area immediately adjacent to Pipes #5 and #6 appeared to be sufficiently stabilized/vegetated.
- The slope/swale along the eastern side of the lead track south of SW4, north of SW5, was not sufficiently vegetated.
- The slope along the western side of the lead track near Station 55+00 Lead Track L-1 was not sufficiently vegetated.
- **Photo 16** shows the area surrounding SW5. It appeared to be sufficiently stabilized/vegetated in most areas. However, the slope south of the outfall had sparse vegetative cover.
- **Photo 17** shows the slope/swale south of Pipe #7. The area shouth of Pipe #7 was not sufficiently vegetated/stabilized in several areas. Ms. Hagerty indicated that the area had been recently covered with ProMatrix. Vegetation was emerging in areas, but remained sparse in other areas. Insufficient stabilization/vegetation was previously documented during the inspections conducted August 23, 2011, and March 12, 2012.
- **Photo 18** shows the area surrounding SW6. Most of the area surrounding SW6 appeared sufficiently stabilized/vegetated, except a few areas where sparse vegetative cover was noted.
- The slope/swale along the eastern side of the lead track south of SW6 was not sufficiently vegetated in some areas.
- **Photo 19** shows the slope/swale adjacent to the inlet of Pipe #8. The slope/swale had insufficient vegetative cover in many areas.
- **Photo 20** shows the slope south of the inlet of Pipe #8. The area was not sufficiently stabilized/vegetated.
- **Photo 21** shows the swale that drains to SW27. The vegetative cover was insufficient in many areas. Insufficient stabilization/vegetation was previously documented during the inspections conducted August 23, 2011, and March 12, 2012. No discharge was occurring at SW27 at the time of the inspection.
- **Photo 22** is an example of the slope up-gradient from SW27, SW28 and Stream 3. The slope was not sufficiently stabilized. Although what appears to be Weeping Lovegrass was emerging, the slope was virtually unchanged from the previous August 23, 2011, and March 12, 2012.
- **Photo 23** shows the silt fence installed at the toe of the slope adjacent to Stream 3. It appeared to be at or near 50% capacity. The sediment accumulation at the toe of the

slope was approximately 1 foot higher than the area on the down-gradient side of the silt fence. Sediment accumulation at the toe of the slope indicates sediment loss from the slope. The same condition was documented during the March 12, 2012, inspection.

- **Photo 24** is an example of the transition area between the gravel/track and the vegetated slope. The transition area was not sufficiently vegetated. Rills and gullies were observed. Ms. Hagerty stated the transition zone will be re-worked.
- **Photo 25** shows the slope/swale up-gradient from SW28. The portion of the slope/swale shown in the photo appeared mostly to be sufficiently vegetated; however, areas of insufficient stabilization/vegetation were observed, especially further to the south (see also **photos 26-27)**. The fence installation has also caused disturbance to established vegetation on the slope. No discharge was occurring from SW28 at the time of the inspection.
- **Photo 26** shows a portion of the slope/swale on the western side of the site, north of Sediment Basin 1, which discharges to SW28. This photo is up-gradient (south) of **photo 25**. The slopes were not sufficiently vegetated. Although this area appeared to have more established vegetation than during the November 22, 2011, and March 12, 2012, inspections, the area remains insufficiently stabilized/vegetated.
- The fence installation has also caused disturbance.
- **Photo 27** shows another portion of the slope/swale on the western side of the site, north of Sediment Basin 1, which discharges to SW28. This photo is up-gradient (southwest) of **photo 26**. The slopes were not sufficiently vegetated. Although this area appeared to have more established vegetation than during the November 22, 2011, and March 12, 2012, inspections, the area remains insufficiently stabilized/vegetated. The fence installation has also caused disturbance.
- **Photo 28** shows the area surrounding SW7. Most of the area surrounding SW7 appeared sufficiently vegetated; however, Ms. Hagerty stated that the slope up-gradient of SW7 was recently re-graded and sprayed with Flexterra. The dominant grass emerging appeared to be rye; however, some Bermuda was observed. Neither grass was fully established and therefore was unable to provide complete and sufficient cover (see also **photo 29)**.
- **Photo 29** shows the slope up-gradient of SW7 that was recently re-graded and sprayed with Flexterra. The dominant grass emerging appeared to be rye; however, some Bermuda was observed. Neither grass was fully established and therefore was unable to provide complete and sufficient cover. According to the August 23, 2011, inspection documentation, this area was sprayed with Flexterra in August of 2011, yet establishment of sufficient cover has not been accomplished.

The central portion of the intermodal yard, Sediment Basin 2, Sediment Basin 3, SW 30 and SW 31

- According to the phasing map provided by Ms. Hagerty, the central portion of the intermodal yard is in Phase 1A and 2 of construction as shown on EC-15, EC-16, EC-18, EC-19, EC-25, EC-26, EC-28 and EC-29. Both sediment basins are depicted to be in a combination of Phase 1A and Phase 2; however, the area surrounding SW30 and SW31 is shown to be in Phase 2.

- The northwest corner of the yard did not appear to be sufficiently stabilized/vegetated.
- No sediment control measures were observed on the storm drain inlets within the pad/trailer area.
- **Photo 30** is looking west across the concrete parking/pad area, showing an example of the area approximately 60 feet in width west of the concrete that was not stabilized, and the vegetation beyond the bare area. No erosion prevention measures (temporary or permanent) were observed. The area to the west of the bare area was vegetated, but the vegetation was either dead or dormant and did not appear to be permanent or perennial.
- **Photo 31** is looking northwest across the future expansion area from the yard entrance access road. The shoulder of the road was covered with gravel. A bare section was observed between the gravel and vegetation. The vegetation north of the bare section was either dead or dormant and did not appear to be permanent or perennial.
- **Photo 32** is looking at the northern section of Sediment Basin 2. The vegetative cover on the banks of the basin appeared sufficient in most areas; however, some sparse areas were observed. The water in the basin had been chemically treated and was being dewatered via a pump to SW30.
- **Photo 33** is looking east at the southern portion of Sediment Basin 2. The vegetative cover on the banks of the basin appeared sufficient in most areas; however, some sparsely vegetated areas were observed.
- **Photo 34** is of SW30. Sediment Basin 2 was being dewatered via SW30. The discharge water was clear. The slope adjacent to SW30 appeared to be sufficiently vegetated. Minor disturbance was observed associated with the fence installation.
- **Photo 35** is looking east across Sediment Basin 3. The vegetative cover on the banks of the basin appeared sufficient in most areas; however, some sparsely vegetated areas were observed. Rills and gullies were observed on the western facing bank (see also **photos 36-37**). The water in the basin had been chemically treated and was being dewatered via a pump to SW31.
- **Photo 36** is a close-up of the concrete flume and the area surrounding the concrete flume within Sediment Basin 3. The area surrounding the concrete flume was not sufficiently stabilized. Rills and gullies were observed. Rills and gullies were also observed and documented during the previous inspection on March 12, 2012.
- **Photo 37** is a close-up of the western facing slope within Sediment Basin 3. The western facing slope was not sufficiently stabilized. Rills and gullies were observed. Rills and gullies were also observed and documented during the previous inspection on March 12, 2012.
- **Photo 38** is of SW31. Sediment Basin 3 was being dewatered via SW31. The discharge water was clear. The slope adjacent to SW31 appeared to be sufficiently vegetated, except an area to the north of the outfall (see also **photo 39)** and disturbance being caused by the installation of the fence.
- **Photo 39** shows the area north of SW31 that was not sufficiently vegetated.
- **Photo 40** shows an area south of Sediment Basin 3. Although the slope appeared to have more established vegetation than during the March 12, 2012, inspection, areas of the slope remained sparsely vegetated. Rills and gullies were observed. Sediment accumulation was observed at the toe of the slope indicating sediment loss from the slope.

- **Photo 41** shows the swale on the western portion of the site, east of Sediment Basin 3, which conveys drainage from a portion of the western side of the site into Sediment Basin 3. A majority of the swale/slope appeared to be sufficiently vegetated. However, areas of sparse vegetation were observed. The transition zone between the rip rap and slope showed signs of erosion. The transition zone between the gravel road shoulder and the slope was not sufficiently vegetated.
- **Photo 42** shows the continuation of the drainage from the area shown in **photo 41**, which flows westward to the area shown in this photo before entering Sediment Basin 3. The berm appeared mostly sufficiently vegetated; however, areas of erosion were observed near the middle of the berm and some of the vegetation appeared dead or dormant and did not appear permanent or perennial.
- **Photo 43** shows the swale on the east side of the eastern berm adjacent to Sediment Basin 2. Drainage from this area discharges into the swale shown in **photo 42**. Both slopes appeared vegetated; however, areas of sparse vegetation were observed. The vegetation in some areas appeared dead or dormant and did not appear permanent or perennial.

SW 9 and the areas which discharge directly or indirectly to SW9, including the northern draining eastern drainage ditch, the area surrounding the inlet of Pipe #10, Pipe #12 and Pipe #13 and Sediment Basin 1

- According to the phasing map provided by Ms. Hagerty, SW 9 and the areas which discharge directly or indirectly to SW9, including the northern draining eastern drainage ditch, the area surrounding the inlet of Pipe #10, Pipe #12 and Pipe #13 and Sediment Basin 1, are in Phase 2 of construction as shown on EC-24, EC-25 and EC-26 of the ECP, except for an area which appears to be the northeastern section of Sediment Basin 1, which is depicted to be in Phase 1A as shown on EC-14 and EC-15.
- **Photo 44** is the area surrounding the inlet end of Pipe #13. Pipe #13 discharges into the area shown in **photo 45**. The slopes were not sufficiently vegetated. Rills were observed.
- **Photo 45** shows the area associated with the outlet end of Pipe #13 and the inlet end of Pipe #12. Pipe #12 discharges into Sediment Basin 1. The area was not sufficiently vegetated. Ms. Hagerty stated that the area was sprayed with Flexterra, but that it will be sprayed again with ProMatix.
- **Photo 46** shows the inlet end of Pipe #12. Pipe #12 discharges into Sediment Basin 1. The area surrounding Pipe #12 was not sufficiently vegetated. Rills were observed.
- **Photo 47** is looking north at the southern portion of Sediment Basin 1. The banks of the basin were not sufficiently stabilized. Ms. Hagerty indicated that the slope up-gradient from the two headwalls had been recently covered with Flexterra; however, vegetation had not yet established. Rills and gullies were observed.
- **Photo 48** is another view of the southern portion of Sediment Basin 1, looking south. The banks of the basin were not sufficiently stabilized. Rills and gullies were observed.
- **Photo 49** is looking northeast at the northern end of Sediment Basin 1. The banks of the basin were not sufficiently vegetated. Rills and gullies were observed. Although the banks appeared to have more established vegetation than during the August 23, 2011, November 22, 2011, and March 12, 2012, inspections, the banks remain insufficiently

stabilized/vegetated. A close-up view of the unstable eastern bank of the basin is shown in **photo 50**. The basin was not discharging at the time of the inspection.

- **Photo 50** shows the eastern bank of Sediment Basin 1. The bank is not sufficiently stabilized/vegetated. Although the banks appeared to have more established vegetation than during the August 23, 2011, November 22, 2011, and March 12, 2012, inspections, the banks remain insufficiently stabilized/vegetated. Rills and gullies were observed.
- **Photo 51** shows the inlet of Pipe #10 and associated low area. The slopes of the low area lack sufficient vegetation in some areas. Ms. Hagerty indicated that ProMatrix had been sprayed on the slopes. Although the area appeared to have more established vegetation than during the August 23, 2011, November 22, 2011, and March 12, 2012, inspections, the area remains insufficiently stabilized/vegetated.
- **Photo 52** shows the outlet ends of Pipe #11 and Pipe #10. Pipe #11 receives drainage from Sediment Basin 1, which was not discharging at the time of the inspection. No discharge was occurring from Pipe #10. Discharge flowing to SW9 from the northern draining eastern drainage ditch/Sediment Basin 8 was observed. The discharge water appeared clear.
- The lower three-fourths of the slope upgradient from Pipe #11 and Pipe #10 appeared to be sufficiently vegetated with Weeping Lovegrass. However, the upper fourth of the slope was not as sufficiently stabilized. Ms. Hagerty indicated that the upper portion had been regraded and covered with Flexterra. What appeared to be rye grass was emerging, but was sparse. Very little Weeping Lovegrass and Bermuda was observed.
- **Photo 53** is of SW9. Discharge from the northern draining eastern drainage ditch/Sediment Basin 8 was observed flowing to SW9 and into Stream 5. The discharge water appeared clear. The row of enhanced silt fence observed during previous inspections had been removed. The area immediately surrounding SW9 appeared to be sufficiently stabilized/vegetated.
- **Photo 54** shows Stream 5 downstream of SW9. The water in the stream appeared to be flowing in response to the discharge originating from the northern draining eastern drainage ditch/Sediment Basin 8.
- **Photo 55** shows disturbance being caused by the fence installation along the limits of clearing, west of Stream 5. No sediment controls were observed.
- **Photos 97-100** show examples of the insufficient vegetation/stabilization on the northern draining eastern drainage ditch. Although the area appeared to have more established vegetation than during the August 23, 2011, and March 12, 2012, inspection, the vegetative cover remains insufficient. Drainage from this area flows into Sediment Basin 8, which was discharging at the time of the inspection. Rills and gullies were observed. Rills and gullies were also observed during the August 23, 2011, and March 12, 2012, inspections. Sediment accumulation in the bottom of the swale is an indication of sediment loss from the slopes.
- **Photo 101** shows Sediment Basin 8. Water was discharging from Sediment Basin 8 at the time of the inspection. It did not appear to be a controlled release via the riser pipe, but rather a leak. Ms. Hagerty indicated that she would have someone look into it. Portions of the slopes within the basin were not sufficiently vegetated. Rills were observed.

- **Photo 102** shows the northern draining eastern drainage ditch north of Sediment Basin 8, which conveys drainage to SW9. The slope/swale appeared to be well vegetated/stabilized. Clear water was discharging from Sediment Basin 8 into the ditch.

Former location of Sediment Basin 5, the southern draining eastern drainage ditch and SW12

- According to the phasing map provided by Ms. Hagerty, the southern draining eastern drainage ditch and SW12 are in Phase 2 of construction as shown on EC-28 and EC-29 of the ECP, except an area near the northern end of the southern draining eastern drainage ditch, which is shown to be in Phase 1A.
- **Photo 90** shows the former location of Sediment Basin 5. Ms. Hagerty indicated that the area was being used to place fill material.
- **Photo 91** shows SW12 at Stream 6. No discharge was occurring at the time of the inspection. No flow was observed in Stream 6. However, accumulation of silt covering the stream bed appeared, evident at and downstream of the discharge point of SW12. The southern draining eastern drainage ditch, which conveys drainage to SW12, was not sufficiently stabilized/vegetated (see also **photos 92-96)**.
- **Photo 92** shows the slope adjacent to the northeast corner of the Loop Track bridge over Stream 6 is shown in this photo. The slope was not stabilized. One straw wattle at the toe of the slope would not be sufficient during a rain event. The up-gradient portion of the southern draining eastern drainage ditch, which conveys drainage to SW12, was not sufficiently stabilized/vegetated (see also **photos 93-96)**.
- **Photo 93** shows a portion of the top slope of the southern draining eastern drainage ditch, which conveys drainage to SW12. The slope was not sufficiently stabilized/vegetated. Gullies were observed.
- **Photo 94** is an example of another portion of the southern draining eastern drainage ditch that conveys drainage to SW12. Vegetation/stabilization was not sufficient. Rills and gullies were observed. Sediment accumulation in the bottom of the swale is an indication of sediment loss from the slopes.
- **Photos 95 and 96** show a massive slope failure that has occurred on the northern end of the southern draining eastern drainage ditch. Vegetation/stabilization was not sufficient. Rills and gullies were observed.

Loop Track, which includes SW34, SW38, SW35, SW19, SW36, SW17, SW13 and SW14

- According to the phasing map provided by Ms. Hagerty, the Loop Track, which includes SW38, SW35, SW19, SW36, SW17, SW13 and SW14, is in Phase 2 of construction as depicted on EC-27 and EC-30 on the ECP. The construction of the Loop Track bridge is depicted to be in Phase 1A as shown on EC-17. The area surrounding SW34 is depicted to be in Phase 1A as shown on EC-20.
- **Photo 56** shows the inlet end of Pipe #41 associated with SW34. The slope adjacent to the pipe was not sufficiently stabilized/vegetated. The bottom of the swale leading to Pipe #41 appeared to be sufficiently vegetated, but some areas were sparsely vegetated. Ms. Hagerty stated that the slope was at final grade. Rills were observed.

- **Photo 57** is of SW34 (outlet end of Pipe #41). Ms. Hagerty stated that the drainage swale down-gradient from the headwall was not at final grade and that the enhanced rock check dam would be removed. The area surrounding SW34 appeared well vegetated/stabilized.
- **Photo 58** shows a berm south of SW34. Ms. Hagerty stated that the berm was covered with Flexterra earlier in the week. No vegetation growth had emerged yet.
- **Photo 59** is of SW42. Ms. Hagerty stated that the area surrounding SW42 was sprayed with Flexterra earlier in the week. No vegetative growth had emerged yet. The water in the pond north of SW42 appeared clear.
- **Photo 60** is of SW38. SW38 discharges to Pond 4. The slope and swale associated with SW38 appeared to be sufficiently stabilized/vegetated; however, sparse coverage was observed on the slope between SW38 and Pipe #31 (see also **photos 61 and 62)**.
- **Photo 61** is of the slope between SW38 and Pipe #31. The vegetative cover was not sufficient. Much of the vegetation appeared dead or dormant and did not appear permanent or perennial.
- **Photo 62** is of Pipe #31. The slope between SW38 and Pipe #31 is also shown in this photo. The vegetative cover was not sufficient. Much of the vegetation appeared dead or dormant and did not appear permanent or perennial.
- **Photo 63** is of SW19. SW19 discharges into Pond 4. Portions of the slope and swale associated with SW19 appeared to have sufficient vegetation. However, some areas were sparse. Rills and gullies were observed.
- The previously installed sump up-gradient from SW35 had been removed. The swale conveying drainage to SW35 was not sufficiently vegetated. Gullies were observed. Vegetation was emerging within the matting installed across the bottom of the swale, but coverage was sparse.
- **Photo 64** is the former location of SW20. The area surrounding former SW20 appeared mostly sufficiently stabilized. However, sparse vegetation on the slope up-gradient of the outfall and Pond 4 was observed.
- **Photo 65** is of SW36 and the location of the inlet end of Pipe #32. Pipe #32 discharges into Pond 4. The swales leading to SW36 appeared to be mostly sufficiently vegetated, but sparse areas were observed.
- **Photo 66** is of SW17. The area surrounding SW17 appeared sufficiently vegetated. However, the swale/slope that conveys drainage to SW17 was not sufficiently stabilized/vegetated in areas (see also **photos 67-68)**.
- **Photo 67** was taken near Station 180+00 on the Loop Track. This area discharges to SW17. Ms. Hagerty explained that the rip rap flume was installed to control run-on onto the site, which was causing the slope to erode. Ms. Hagerty also explained that the area surrounding the flume was re-graded and covered with Flexterra approximately one month prior to the inspection. No vegetative growth was observed yet.
- **Photo 68** was taken near Station 180+00 on the Loop Track. This area discharges to SW17. Ms. Hagerty explained that this area was re-graded and covered with Flexterra approximately one month prior to the inspection. No vegetative growth was observed yet.
- **Photo 69** was taken near Station 180+00 on the Loop Track. This area discharges to SW36. Ms. Hagerty explained that the area was re-graded and covered with ProMatrix. No vegetative growth was observed yet.

- **Photo 70** shows the former location of SW39. The slope up-gradient from the former location of SW39 appeared to be sufficiently vegetated; however, vegetative cover was sparse and insufficient in areas.
- **Photo 71** is of SW14. SW14 discharges into Stream 6; however, no discharge was occurring at the time of the inspection. Sediment accumulation appeared to have been recently removed from the silt fence. Based on the sediment staining on the silt fence, sediment accumulation has reached the top of the fencing. Areas adjacent to SW14 were not sufficiently vegetated.
- The slope/swale on the western side of the eastern facing Loop Track, which conveys drainage to the area shown in **photo 72,** and ultimately SW13, was not sufficiently vegetated.
- **Photo 72** shows the area between Stations 160+00 and 215+00 on Loop Track LP-1. Discharge from the western side of the eastern facing Loop Track-169+00-161+00 flows through this area toward SW 13. Ms. Hagerty stated that a sump was created up-gradient of the inlet end of the pipe.
- **Photo 73** is looking north at an area of disturbance on the southwestern corner of the Loop Track bridge. No erosion prevention or sediment control measures were observed in this area. This area drains to the north toward Stream 6.
- **Photo 74** is the southwestern corner of the Loop Track bridge adjacent to Stream 6. Sediment accumulation was observed covering the top of the stream bank down-gradient from the silt fence, evidencing that sediment has escaped the silt fence and is not sufficient.
- **Photo 75** is the northwestern corner of the Loop Track bridge adjacent to Stream 6. No erosion prevention or sediment controls were installed on the bank of Stream 6.
- **Photo 76** is of Stream 6 at the confluence of the northwest and southwest corners of the Loop Track bridge. Sediment accumulation appeared to be covering the bed of Stream 6 at the confluence point. Stream 6 could not be safely accessed due to the steepness of the bank. No water was observed in Stream 6 at the time of the inspection.
- **Photo 77** shows an example of the area on the northern side of the Loop Track. The photo was taken at approximately Station 210+00. Rills and gullies were observed. The vegetation was dead or dormant and did not appear permanent or perennial. Vegetative cover was not sufficient.

SW 33, SW 15, SW 16 and the area adjacent to the permanent road (entrance road) bridge being constructed over Stream 6

- According to the phasing map provided by Ms. Hagerty, SW 33, SW 15 and SW 16 are in Phase 2 of construction as shown on EC-26 and EC-27 of the ECP.
- **Photo 78** shows the swale leading to SW15. Weeping Lovegrass was establishing, but was sparse.
- **Photo 79** is of SW16. Weeping Lovegrass was establishing, but was sparse in areas.
- **Photo 80** is looking downstream at Stream 6 from the permanent road (entrance road) bridge over Stream6. No flow was observed in Stream 6.
- **Photo 81** shows the area that discharges to the northeast corner of the permanent road (entrance road) bridge over Stream 6-see **photos 82 and 83**. Ms. Hagerty stated that the

stockpile was covered with Flexterra earlier in the week. No vegetation was observed in the newly sprayed areas.

- **Photo 82** shows the slope/swale up-gradient from the northeast corner of the permanent road (entrance road) bridge over Stream 6. The area was not sufficiently vegetated. Rills and gullies were observed. Silt fence located at the toe of the slope appeared to be past 50% capacity.
- **Photo 83** is looking north at the northeast corner of the permanent road (entrance road) bridge over Stream 6. Ms. Hagerty indicated that the location of SW11 has been moved to the swale on the northeast corner of the permanent road bridge over Stream 6.
- **Photo 84** shows the discharges directed towards SW33. Ms. Hagerty stated that the check dams and straw wattles were installed earlier in the week. She also indicated that the area was sprayed with Flexterra earlier in the week. No vegetation was observed in the newly sprayed areas.

SW37 and Sediment Basin 4

- According to the phasing map provided by Ms. Hagerty, the area surrounding the upper reach of Stream 4 and SW37 are in Phase 2 of construction as shown on EC-26 and EC-29. Sediment Basin 4 appears to be in Phase 1A and 2 of construction as shown on EC-16, EC-19, EC-26 and EC-29.
- **Photo 85** is of Sediment Basin 4. Weeping Lovegrass was establishing on the banks of the basin; however, sparse vegetative cover was observed in areas. Rills and gullies were observed on the banks of the basin-see **photo 86**. The basin was not discharging at the time of the inspection.
- **Photo 86** is a close-up view of gullies on the northern bank of Sediment Basin 4.
- **Photo 87** is of SW37 (outlet end of Pipe #40). SW37 is the discharge point of Sediment Basin 4 and discharges into Stream 4. No discharge was occurring at the time of the inspection. Although the slope adjacent to and up-gradient from SW37 appeared to have more established vegetation than during the March 12, 2012, inspection, the area remains insufficiently vegetated (see **photo 88**). Rills and gullies were observed. Rills and gullies were also observed during the previous inspection on March 12, 2012.
- **Photo 88** shows the slope adjacent and up-gradient from SW37. Although the slope adjacent to and up-gradient from SW37 appeared to have more established vegetation than during the March 12, 2012, inspection, the area remains insufficiently vegetated. Rills and gullies were observed. Rills and gullies were also observed during the previous inspection on March 12, 2012.
- **Photo 89** shows the slope east of the unaltered portion of Stream 4 and SW37. Although the area appeared to have more established vegetation than during the March 12, 2012, inspection, the vegetative cover appeared dead or dormant, did not appear permanent or perennial and was not sufficient.
- The slope facing east, west of the Administration Building, was not sufficiently vegetated.

ADDITIONAL INFORMATION:

- The Notice of Coverage was posted outside the construction trailer.
- The SWPPP, records of inspection, inspector certification were located inside the trailer.
- Rain guages are stationed on-site and at the construction trailer.
- IMP 1, IMP 2 and IMP 3 were not observed during the inspection.
- Ms. Hagerty indicated that soil tests on site had been conducted, but she was not clear as to why vegetation was so difficult to establish.
- Ms. Hagerty indicated that water from the basins is being pumped into water trucks and is being used for irrigation on portions of the site.
- Ms. Brazile explained to Ms. Hagerty at the conclusion of the inspection that WPC's main concerns are the lack of sufficient vegetation in many areas across the site, rill and gully formation in many areas across the site, and the uncontrolled release of water from Sediment Basin 8.

SIGNATURE: Jacklyn Brazile